

PREM Students Develop Prototype Lab-on-a-chip

In the Gomez group students have successfully developed a lab-on-a-chip microfluidic device for use in our studies focusing on affinity capillary electrophoresis (ACE). Figure 1 shows the chip with dye in the channels. This chip is a prototype and will be used to detect small quantities of material (femtamole levels).

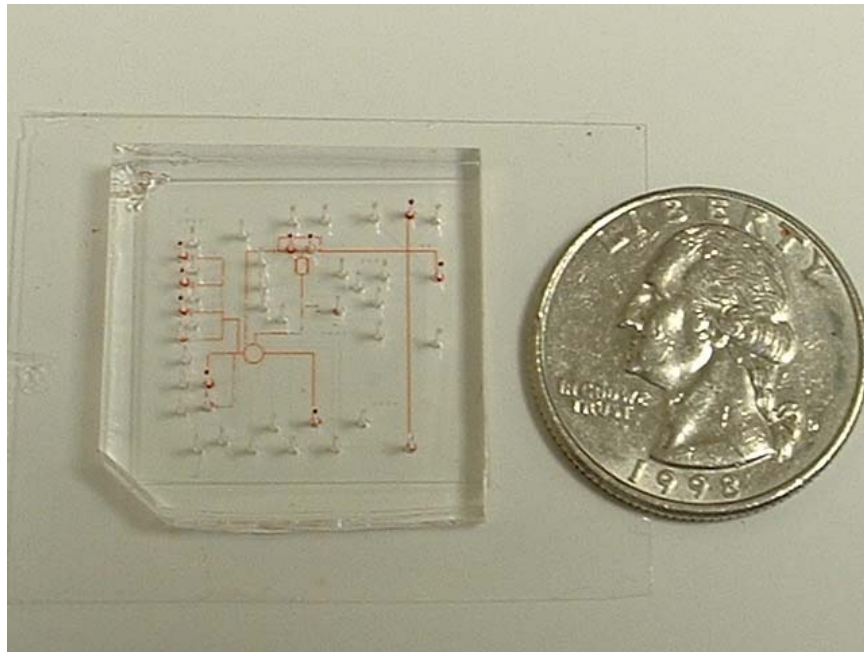


Figure 1. Prototype lab-on-a-chip microfluidic device made of polydimethylsiloxane (PDMS) incorporating valve-pump machinery filled with red dye. Channels are 100 micrometers wide and 25 micrometers high.